

What Is Claimed Is:

1. A method for tape management in a system which virtually emulates a magnetic tape unit on a disk drive, comprising:

5 a step of creating a virtual tape file from a virtual tape storage area on said disk drive; and

 a step of transferring said created virtual tape file to a virtual tape file of another system by a file copy function between disk drives.

10 2. The method for tape management according to claim 1, wherein said disk drive is a magnetic disk drive, and said transfer is performed so as to be asynchronous to the system.

3. A method for tape management in a network system which connects, via a network:

15 a first system which virtually emulates a magnetic tape unit on a disk drive and has a virtual tape unit having a virtual tape storage area, a first virtual tape file, and a first virtual tape transfer processing unit having first virtual tape management information defining a structure of said first
20 virtual tape file; and

 a second system having a second virtual tape file, and a second virtual tape transfer processing unit having second virtual tape management information defining a structure of said second virtual tape file, said method comprising:

25 a step of generating a first virtual tape file from said

virtual tape storage area; and

a step of transferring said first virtual tape file to said second virtual tape file by a file copy function between disk drives so as to be asynchronous to said first and second systems.

4. The method for tape management according to claim 3, wherein prior to said transfer, said virtual tape unit is exclusively controlled for each virtual tape volume, and said first and second virtual tape files are exclusively controlled for each file.

5. The method for tape management according to claim 3, wherein said second system further has a tape using task execution part, said tape using task execution part gives a virtual tape input request of said first system, and said transfer is performed based on said input request.

6. The method for tape management according to claim 3, wherein said first virtual tape transfer processing unit monitors an expiration date of said transferred virtual tape file, and gives a returning request when the expiration date is expired.

7. A method for tape management in a network system which connects, via a network:

a first system which virtually emulates a magnetic tape unit on a disk drive and has a virtual tape unit having a virtual tape storage area, a first virtual tape file, and a first virtual

tape transfer processing unit having first virtual tape management information defining a structure of said first virtual tape file; and

a second system having a second virtual tape file, a second
5 virtual tape transfer processing unit having second virtual tape management information defining a structure of said second virtual tape file, and a tape using task execution part, said method comprising:

a step in which said tape using task execution part gives
10 a virtual tape input request;

a step in which said second virtual tape transfer processing unit locks said second virtual tape file to give a virtual tape input request to said first virtual tape transfer processing unit;

15 a step in which according to said input request, said first virtual tape transfer processing unit locks a virtual tape volume and said first virtual tape file to create said first virtual tape file and said first virtual tape management information to said input request;

20 a step in which said first virtual tape file is transferred to said second virtual tape file using a copy function between disk drives so as to be asynchronous to said first system;

a step in which said second virtual tape transfer processing unit allows said tape using task execution part to
25 use said second virtual tape file;

a step in which said first virtual tape transfer processing unit unlocks said virtual tape volume and said first virtual tape file; and

a step in which said second virtual tape transfer processing unit unlocks said second virtual tape file.

8. A method for tape management in a network system which connects, via a network:

a first system which virtually emulates a magnetic tape unit on a disk drive and has a virtual tape unit having a virtual tape storage area, a first virtual tape file, and a first virtual tape transfer processing unit having first virtual tape management information defining a structure of said first virtual tape file; and

a second system having a second virtual tape file, a second virtual tape transfer processing unit having second virtual tape management information defining a structure of said second virtual tape file, and a tape using task execution part, said method comprising:

a step in which said tape using task execution part gives a virtual tape output request;

a step in which said second virtual tape transfer processing unit locks said second virtual tape file to give a virtual tape output request to said first virtual tape transfer processing unit;

a step in which according to said output request, said

first virtual tape transfer processing unit locks a virtual tape volume and said first virtual tape file to notify, to said second virtual tape processing unit, that the virtual tape is usable;

5 a step in which said second virtual tape transfer processing unit outputs said second virtual tape file in response to said notification to transfer said second virtual tape file to said first virtual tape file using a copy function between disk drives;

10 a step in which said first virtual tape transfer processing unit returns data from said first virtual tape file and said first virtual tape management information to said virtual tape storage area after said transfer;

 a step in which said first virtual tape transfer processing
15 unit unlocks said virtual tape volume and said first virtual tape file when said transfer is completed; and

 a step in which said second virtual tape transfer processing unit unlocks said second virtual tape file when said transfer is completed.

20 9. A network system which connects, via a network:

 a first system which virtually emulates a magnetic tape unit on a disk drive and has a virtual tape unit having a virtual tape storage area, a first virtual tape file, and a first virtual tape transfer processing unit having first virtual tape
25 management information defining a structure of said first

virtual tape file; and

a second system having a second virtual tape file, a second virtual tape transfer processing unit having second virtual tape management information defining a structure of said second virtual tape file, and a tape using task execution part, said system comprising:

means in which said second virtual tape transfer processing unit gives a virtual tape input request to said first virtual tape transfer processing unit based on a virtual tape input request of said tape using task execution part; and

means in which said first virtual tape transfer processing unit creates said first virtual tape file and said first virtual tape management information to said input request in response to said input request to transfer said first virtual tape file to said second virtual tape file using a copy function between disk drives so as to be asynchronous to said first system.